

Exhibit 2

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

IMPLICIT, LLC,

Plaintiff,

v.

HUAWEI TECHNOLOGIES USA, INC., et
al.

Defendants.

§
§ CIVIL ACTION NO. 6:17-cv-182-JRG
§ (CONSOLIDATED CASE)
§
§
§ JURY TRIAL DEMANDED
§
§

**DECLARATION OF DR. ATIF HASHMI IN SUPPORT OF IMPLICIT LLC'S RESPONSE
TO PALO ALTO NETWORKS, INC.'S MOTION FOR PARTIAL SUMMARY JUDGMENT
OF NON-INFRINGEMENT AS TO U.S. PATENT NO. 9,325,740**

I, Atif Hashmi, hereby declare:

1. I have been retained by Plaintiff Implicit, LLC (“Implicit”) as an expert in connection with the above-captioned matter. I submit this declaration in support of Implicit’s concurrently filed Response to Defendant Palo Alto Networks, Inc.’s (“PAN’s”) Motion for Partial Summary Judgment of Non-Infringement as to U.S. Patent No. 9,325,740 (the “‘740 Patent”) [D.I. 85] based on my personal knowledge and following a reasonable investigation of PAN’s source code production, technical documents, and other relevant materials. If called upon as a witness, I could and would competently testify to the truth of each statement herein.

2. I am an engineer and co-founder and Chief Technology Officer (“CTO”) of Thalchemy Corporation, which develops software and hardware modules for efficient processing of data in modern smartphones and wearable devices. I hold a M.S. and a Ph.D. in Electrical Engineering from the University of Wisconsin – Madison. My educational training and research have been focused studying and developing computer hardware, computer operating systems, computer networks, computer software, and artificial intelligence algorithms. I have been designing computer software and hardware for over 10 years. I have programmed in many software programming languages including C, C++, Java, Python, JavaScript, Embedded C, and assembly language. I have developed software for computer operating systems including Linux and Android operating systems. I have used hardware design tools including Verilog-HDL to develop hardware products deployed on Field Programmable Gate Arrays (FPGAs). I have developed hardware and software for network systems that monitor electrical appliances connected to a computer network and have designed hardware and software for network routers. I have authored several papers and articles related to computer architecture, application programming interfaces, computer networks, neural networks, and artificial intelligence that

have been published in peer-reviewed Computer Science and Electrical Engineering conferences and workshops, some of these publications have received best paper awards. I have also been an invited speaker at venues including academic conferences and technology companies. I am a named inventor on multiple patents and patent applications for neural network software and hardware.

3. I have been retained by Implicit in the above-captioned matter to assist Implicit in its review of PAN's source code, development of infringement theories, and preparation of infringement contentions. To this end, I spent approximately 10 full days reviewing PAN's source code production. I have also reviewed and studied the '740 Patent, Implicit's infringement contentions related to the '740 Patent, as set out in Exhibit B to the Declaration of Evan Budaj ("Budaj Decl."), the Court's claim construction order construing the same claim language in the same patent in *Implicit, LLC v. Trend Micro, Inc.*, no. 6:16-cv-80-JRG (E.D. Tex. March 29, 2017) (the "Trend Micro Order"), and the parties' agreed-upon claim constructions for the '740 Patent as set out in the parties' Joint Claim Construction Chart, which I understand has been filed in the matter at D.I. 94-1.

4. With respect to this declaration, I have been asked by Implicit to explain: (1) the use and interpretation of the term "modification" in the context of a "transformation operation", as is taught by the '740 Patent; (2) if PAN's understanding of the term "modification" that excludes code replacement consistent with the teachings of the '740 Patent; (3) if the accused devices "modify" code and, therefore, meet the "transformation operation" limitation of the '740 Patent, as stipulated by the parties.

5. As described in the '740 Patent, a "transformation operation" is any operation that transforms, or "modifies," code. The '740 Patent teaches that transformation operations include,

for example, a verification transformer “that is able to analyze input code [or a requested code file] and determine areas that might not be safe.” *See Trend Micro Order at 45.* The ’740 Patent, however, *does not* teach that unsafe code areas present in the requested file transformed by the verification transformer *cannot* constitute the content of a requested file in its entirety. Once the verification transformer identifies unsafe code areas in the requested file, where unsafe code areas may constitute the content of the requested file in its entirety, the unsafe code may be modified such that “unsafe code [is] flagged in such a way that a user can be warned about the possible risks of executing the code fragment,” *see id.*, which may constitute the entire code present in the requested file. In such a scenario, the *produced* resource or the code that generates and displays the warning about the possible risks to the user, may not contain any elements of the code present in the requested file.

6. In other words, the ’740 Patent specification *does not* require that only a portion of the entire code present in a requested file may be modified in order for the modification to be considered a “transformation operation”; rather, consistent with the teachings of the ’740 Patent and other material I considered, a requested code file may be modified in its entirety, or replaced, by the verifier transformer—and this modification would still constitute a “modification” of code that can be considered a “transformation operation.”

7. As described in Implicit’s infringement contentions related to the ’740 Patent, as set out in Exhibit B to the Budaj Decl., one way by which the accused products meet the “transformation operation” requirement of the claims is to display a banner indicating that access to a requested resource, for example, a requested code file, has been blocked.¹ The banner may

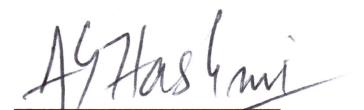
¹ As I use the term here, “blocked” means that the downloading of the requested file to the computer that originally initiated the download request has been interrupted and will not be allowed until the user clicks the “continue” button.

include an option for the user to “continue” to access the requested resource. Within PAN’s accused products, the process of generation of the warning banner and its display on the user’s computer and the accompanying functionality is implemented by the JavaScript code, which is sent instead of the requested resource to the user’s computer by PAN’s accused products. By generating the JavaScript code to display the banner on the user’s computer, where the generated JavaScript code may completely differ from the code present in the requested file, PAN’s accused products modify the code present in the requested file.

8. Based on my review of the materials outlined earlier, Implicit’s infringement contentions related to the ’740 Patent, as set out in Exhibit B to the Budaj Decl., demonstrate how PAN’s accused products meet the “transformation operation” limitation of the claims of the ’740 Patent.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Dated: March 2, 2018



Dr. Atif Hashmi